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Biomass Program

Feedstock Interface R&D

Hybrid Poplar Research

Dedicated woody biomass such as hybrid poplars could be developed as a viable energy and fiber resource. This Congressionally-mandated project focuses on characterizing and improving hybrid poplar plantation forestry systems with the ultimate goal of using poplars as a dedicated energy crop.

Crop development research will be conducted to enable the effective deployment of intensive plantation forestry systems which have populations of fast growing trees that are pest resistant and possess characteristics such as ease of propagation. The goal is to facilitate reliable and economical commercial deployment of poplar as an energy resource.

In addition, an integrated research program will be conducted with university collaborators to gain a better understanding of the critical subject of integrated pest management.

The final phase of the project will include a full cost/benefit analysis of intensively-managed cottonwood plantation programs with the objective of understanding the economics of the system and to determine the costs and benefits.

R&D Pathway

Researchers will first undertake crop research to produce approximately 5,000 new intra- or inter-specific hybrids for study. Tree colonies will be established and the resistance of the hybrid species to beetles will be studied.

Other activities include initiating an integrated research program, developing life table studies, and completing a full cost/benefit analysis.

Benefits

- **Help establish the use of hybrid poplars as a viable energy resource**

Applications

Knowledge gained from this project will improve understanding of hybrid poplar plantation forestry systems and the costs and benefits of managed plantation forestry systems.

Project Participants

North Central Forest Experiment Station, U.S. Forest Service, U.S. Department of Agriculture

Project Period

FY 2003 – FY 2005

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Visit the Web site for the Office of the Biomass Program (OBP) at
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